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09/755,317	01/05/2001	Thomas R. Goodwin		5059

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EXAMINER

MAURO JR, THOMAS J

ART UNIT	PAPER NUMBER
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2143

5

DATE MAILED: 05/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/755,317

Applicant(s)

GOODWIN, THOMAS R.

Examiner

Thomas J. Mauro Jr.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 January 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-20 are pending and are presented for examination. A formal action on the merits of claims 1-20 follows.

Drawings

2. The drawings are objected to because they fail to show the necessary textual labels of the various features in Figure 1. Each element in Figure 1 must be labeled as described in the specification. A descriptive textual label for each numbered element in the figures would be necessary for one to fully understand the figures without substantial analysis of the detailed specification. Any structural detail that is of sufficient importance to be described should be shown and properly labeled in the drawings. See 37 CFR 1.84(n) and (o). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to because Figures 1A and 1B fail to have numeric labels identifying each item in the flow chart and correlated to specific items in the specification. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

4. New corrected drawings are required in this application because the drawings are not acceptable for reproducible quality. Under 37 CFR 1.84(l), drawings must be made by a process

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which will give them satisfactory reproduction characteristics. Every line, number, and letter must be durable, clean, black (except for color drawings), sufficiently dense and dark, and uniformly thick and well defined. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-2 and 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Good (U.S. 6,308,120) in view of Sandifer (U.S. 6,292,806).

Regarding claim 1, Good teaches the invention substantially as claimed, a method comprising:

(a) establishing a client system [**Good -- Figures 1 and 2 and Col. 3 lines 14-15 and lines 28-32 – Local communications terminal at service station is client system**];

(b) establishing a server system [Good -- Figures 1 and 2 and Col. 3 lines 14-27 – **Regional communications terminals act as a server to the local communications terminals belonging to that region**];

(c) establishing a back-up system [Good -- Figures 1 and 2 and Col. 3 line 13 and lines 44-49 – **Central Equipment Manager act as a backup server by storing all service status information for each region**];

(d) connecting said client system, said server system, and said back-up system [Good -- Figures 1 and 2 and Col. 3 lines 32-62 – **Local and regional communications terminals, along with central equipment manager, communicates over a Wide Area Network (WAN)**];

(e) under the control of said client system, displaying a record form, and in response to data entered on said client system, completing data fields in said record form and sending said completed record form to said server system with a unique client identifier [Good -- Figure 4, Col. 5 lines 61-67 – Col. 6 lines 1-4, Col. 6 lines 64-67 – Col. 7 lines 1-13, Col. 7 lines 29-36, Col. 8 lines 21 – 51 and Col. 9 lines 14-23 – **Vehicle repair and server information is entered by client system into a record and stored locally. In near real-time, vehicle status file, i.e. containing record, is sent to server, i.e. regional communications terminal with both a control number and vehicle identification number which both uniquely identify the service and the client, i.e. vehicle, respectively**];

(f) under the control of said server system, receiving said record with said data and said unique client identifier, and storing said record in a segregated database keyed to said client identifier [Good -- Figures 2 (Database attached to regional communications terminal) and 8, Col. 7 lines 29-36 and Col. 10 lines 55-61 – **Regional communications terminal receives**

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file containing vehicle and service records and stores them in its local database. These records are stored in a database containing multiple fields which are keyed by either of the unique identifiers, i.e. service identifier (control number) or client identifier (vehicle identification number)];

(g) under the control of said back-up system, receiving said completed record form permanently stored in said server system, and making a permanent back-up so that a back-up of said segregated database is made **[Good -- Figure 8, Col. 7 lines 43-53 and Col. 11 lines 20-30 – Regional communications terminal, i.e. server, sends file containing all vehicle service and status information to central equipment manager to provide backup to the regional communications terminals database],**

whereby said client system, said server system, said back-up system, and said means for connection are used to make and store a record in said server system that is accessible to said client system and backed up in said back-up system.

Good fails to explicitly teach that the record is permanent and unalterable or undeletable.

Sandifer, however, discloses that write protection is provided such that each inspection is permanently, i.e. lasting forever, attached to each record so that it is unalterable **[Sandifer -- Col. 35 lines 14-22].**

Both Good and Sandifer disclose methods concerned with keeping maintenance / service records for transportation equipment.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the write protection to provide permanent, unalterable records, as taught

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by Sandifer into the invention of Good, in order to provide security for each record so that critical information is not tampered with or changed.

Regarding claim 2, Good-Sandifer teach the invention substantially as claimed, as aforementioned in claim 1, including wherein under the control of said server system providing automatic warnings of non-compliance with regulations and sending said warnings to said client system whereby aid is provided in avoiding inadvertent regulatory violations [**Good -- Col. 11 lines 61-67 – Col. 12 lines 1-7 and lines 29-41 – Automatic advisory warning will pop-up on local communications terminal to indicate vehicle has violated company regulation with regards to number of services performed. This alerts local facility to consider not renting a particular vehicle to avoid possible problems].**

Regarding claim 8, Good teaches the invention substantially as claimed, a system comprising:

(a) a client computer having a display, a keyboard for data entry, a network connection, and software enabling said client computer to connect to said network connection [**Good -- Figures 1 and 2, Col. 3 lines 14-15 and lines 28-32 and Col. 5 lines 16-37 – Local communications terminal at service station is client system which has a display, keyboard, mouse, network connection and software];**

(b) a server computer with a network connection and record keeping software [**Good -- Figures 1 and 2, Col. 3 lines 14-27 and Col. 5 lines 16-51 – Regional communications**

terminals act as a server to the local communications terminals belonging to that region.

Regional terminal has network connection and software, i.e. FoxPro™];

(c) back-up data storage computer having a network connection [Good -- Figures 1 and 2 and Col. 3 line 13 and lines 32-62 – Central Equipment Manager act as a backup server by storing all service status information for each region. It too is connected to the network];

(d) means for making a record on said client computer and sending said record on said network connection to said server computer, said record keyed to a unique client identifier [Good -- Figure 4, Col. 5 lines 61-67 – Col. 6 lines 1-4, Col. 6 lines 64-67 – Col. 7 lines 1-13, Col. 7 lines 29-36, Col. 8 lines 21 – 51 and Col. 9 lines 14-23 – Vehicle repair and server information is entered by client system into a record and stored locally. In near real-time, vehicle status file, i.e. containing record, is sent to server, i.e. regional communications terminal with both a control number and vehicle identification number which both uniquely identify the service and the client, i.e. vehicle, respectively];

(e) means for receiving a client system generated record in said server, storing and organizing said client system generated record with record keeping software in said server computer whereby once a client system generated record is recorded and stored in said server system [Good -- Figures 2 (Database attached to regional communications terminal) and 8, Col. 5 lines 48-51, Col. 7 lines 29-36 and Col. 10 lines 55-61 – Regional communications terminal receives file containing vehicle and service records and stores them in its local database, controlled and operated by software]; and

(f) means for making a back-up copy of said client generated record in said back-up data storage computer [Good -- Figure 8, Col. 7 lines 43-53 and Col. 11 lines 20-30 – Regional communications terminal, i.e. server, sends file containing all vehicle service and status information to central equipment manager to provide backup to the regional communications terminals].

Good fails to explicitly teach that the record is permanent and unalterable or undeletable.

Sandifer, however, discloses that write protection is provided such that each inspection is permanently, i.e. lasting forever, attached to each record so that it is unalterable [Sandifer -- Col. 35 lines 14-22].

Both Good and Sandifer disclose methods concerned with keeping maintenance / service records for transportation equipment.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the write protection to provide permanent, unalterable records, as taught by Sandifer into the invention of Good, in order to provide security for each record so that critical information is not tampered with or changed.

Regarding claim 9, this is a system claim corresponding to the method claimed in claim 2. It has similar limitations; therefore, claim 9 is rejected under the same rationale.

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7. Claims 3 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Good (U.S. 6,308,120) and Sandifer (U.S. 6,292,806), as applied to claim 2 above, in view of Chapin, Jr. (U.S. 5,931,878).

Regarding claim 3, Good-Sandifer teach the invention substantially as claimed, as aforementioned in claim 2 above, but fail to teach providing notification of maintenance requirements to the client.

Chapin, however, discloses a computerized prompting system which provides a maintenance reminder on the screen of a computer user [**Chapin -- Figures 1 and 2 and Col. 2 lines 48-58**]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the maintenance reminders, as taught by Chapin into the invention of Good-Sandifer, in order to alert users to upcoming maintenance requirements and to remove the possibility of forgetting to have maintenance, possibility critical maintenance, performed.

Regarding claim 10, this is a system claim corresponding to the method claimed in claim 3. It has similar limitations; therefore, claim 10 is rejected under the same rationale.

8. Claims 4-7 and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Good (U.S. 6,308,120), Sandifer (U.S. 6,292,806), Chapin, Jr. (U.S. 5,931,878), as applied to claims 3 and 10 above respectively, in view of Evans (U.S. 6,347,329).

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Regarding claim 4, Good-Sandifer-Chapin teach the invention substantially as claimed, as aforementioned in claim 3 above, but fail to explicitly teach that the records are only accessible to a client using a unique client identifier.

Evans, however, discloses a medical records system which contains a database of patient information accessible to users in varying degree based upon a unique client identifier, i.e. password [Evans -- Col. 2 lines 27-33 and Col. 15 lines 24-34].

Both Good, Sandifer and Evans disclose methods concerned with keeping information records in a database stored over a network.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate requiring a unique client identifier to access a database of records, as taught by Evans into the invention of Good-Sandifer-Chapin, in order to provide security for each record so that critical information is not tampered with, changed, or viewed by unauthorized users, which provides protection of the data.

Regarding claim 5, Good-Sandifer-Chapin-Evans teach the invention substantially as claimed, as aforementioned in claim 4 above, wherein under the control of said server system, providing search capabilities to said client system for searching of said segregated database [Good -- Col. 9 lines 40-45 – Database can be searched in a variety of ways].

Regarding claim 6, Good-Sandifer-Chapin-Evans teach the invention substantially as claimed, as aforementioned in claim 5 above, wherein under the control of said server system, providing a tracking history of all record forms stored in said segregated database [Good --

Figures 4 and 5, Col. 6 lines 64-67 – Col. 7 lines 1-13 and Col. 9 lines 40-45 – History of all recorded record forms for a particular vehicle can be viewed as a report, which provides a tracking history of the maintenance/service work performed].

Regarding claim 7, Good-Sandifer-Chapin-Evans teach the invention substantially as claimed, as aforementioned in claim 6 above, wherein under the control of said client system providing a means for printing copies of record forms [**Good -- Col. 5 line 21 and Col. 12 lines 37-41 – System allows user to print service events, i.e. records**] stored in said segregated database keyed to said client identifier [**Good -- Figure 4, Col. 5 lines 60-67 – Col. 6 lines 1-4, Col. 6 lines 64-67 – Col. 7 lines 1-13 – Records are stored in a database containing multiple fields which are keyed by either of the unique identifiers, i.e. service identifier (control number) or client identifier (vehicle identification number)]**].

Regarding claims 11, 12 and 13, these are system claims corresponding to the method claimed in claims 4, 5 and 7 respectively. They have similar limitations; therefore, claims 11, 12 and 13 are rejected under the same rationale.

9. Claims 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Good (U.S. 6,308,120) in view of Sandifer (U.S. 6,292,806) and further in view of Evans (U.S. 6,347,329).

Regarding claim 14, Good teaches the invention substantially as claimed, a system comprising:

(a) a client computer having a display, means for data entry, means for connection to a network, and software using said means for network connection to connect a remote server computer [Good -- Figures 1 and 2, Col. 3 lines 14-15 and lines 28-40 and Col. 5 lines 16-37 – Local communications terminal at service station is client system which has a display, keyboard, mouse, software and a network connection to communicate with regional communications terminal, i.e. remotely located server];

(b) said remote server computer with means for network connection to said client computer and said client computer software, and with record keeping software [Good -- Figures 1 and 2, Col. 3 lines 14-40 and Col. 5 lines 16-51 – Regional communications terminals act as a server to the local communications terminals belonging to that region. Regional terminal has network connection to communicate with local communications terminals and database, i.e. record keeping, software, i.e. FoxPro™];

(c) said record keeping software with means for providing automatic warnings of non-compliance with regulations to said client computer [Good -- Col. 11 lines 61-67 – Col. 12 lines 1-7 and lines 29-41 – Automatic advisory warning will pop-up on local communications terminal to indicate vehicle has violated company regulation with regards to number of

services performed. This alerts local facility to consider not renting a particular vehicle to avoid possible problems];

(d) said record keeping software in said remote server computer with means for storing records **[Good Figures 2 and 8, Col. 5 lines 48-51, Col. 7 lines 29-36 and Col. 10 lines 55-61 – Regional communications terminal receives file containing vehicle and service records and stores them in its local database, controlled and operated by software];** whereby said client computer, said remote server computer, and said record keeping software can be used to make and store record in said server computer.

Good fails to explicitly teach that the record is permanent and unalterable or undeletable, that the system is compliant with Federal Aviation Administration (FAA) regulations and that the records are only accessible to a client using a unique client identifier.

Sandifer, however, discloses that write protection is provided such that each inspection is permanently, i.e. lasting forever, attached to each record so that it is unalterable **[Sandifer -- Col. 35 lines 14-22]**. Furthermore, Sandifer discloses a system with electronic logbooks which are in compliance with FAA regulations **[Sandifer -- Col. 4 lines 62-67 – Col. 5 lines 1-9]**.

In addition, Evans discloses a medical records system which contains a database of patient information accessible to users in varying degree based upon a unique client identifier, i.e. password **[Evans -- Col. 2 lines 27-33 and Col. 15 lines 24-34]**.

Both Good, Sandifer and Evans disclose methods concerned with keeping information records in a database stored over a network.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the write protection to provide permanent, unalterable records, and

FAA regulations, as taught by Sandifer, along with requiring a unique client identifier to access a database of records, as taught by Evans into the invention of Good, in order to provide security for each record so that critical information is not tampered with, changed, or viewed by unauthorized users, which provides protection of the data. Furthermore, it would have been obvious to combine FAA regulations into the database system to provide a system which holds up to the quality initiative, standards and rules set up by the FAA.

Regarding claim 15, Good-Sandifer-Evans teaches the invention substantially as claimed, as aforementioned in claim 14 above, wherein said record keeping software keeps plane maintenance records to assure compliance with FAA regulations regarding plane maintenance **[Sandifer -- Col. 33 lines 62-67 – Col. 34 lines 1-41 – software keeps maintenance/service records of plane in a logbook to be in compliance with FAA regulations]**.

10. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Good (U.S. 6,308,120), Sandifer (U.S. 6,292,806) and Evans (U.S. 6,347,329), as applied to claim 15 above, in view of Jiang (U.S. 6,278,913).

Regarding claim 16, Good-Sandifer-Evans teach the invention substantially as claimed, as aforementioned in claim 15 above, but fails to explicitly teach keep pilot flying records. Jiang, however, discloses an automated flight data management system which keeps pilot flying records **[Jiang -- Figure 12, Col. 3 lines 7-17 and Col. 15 lines 49-64]**.

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate pilot flight logs, as taught Jiang into the invention of Good-Sandifer-Evans, in order to automate the preparation of and to electronically provide pilot information.

11. Claims 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Good (U.S. 6,308,120), Sandifer (U.S. 6,292,806), Evans (U.S. 6,347,329) and Jiang (U.S. 6,278,913), as applied to claim 16 above, in view of Chapin, Jr. (U.S. 5,931,878).

Regarding claim 17, Good-Sandifer-Evans-Jiang teach the invention substantially as claimed, as aforementioned in claim 16 above, but fails to explicitly teach providing notification of maintenance requirements to the client.

Chapin, however, discloses a computerized prompting system which provides a maintenance reminder on the screen of a computer user [**Chapin -- Figures 1 and 2 and Col. 2 lines 48-58**].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the maintenance reminders, as taught by Chapin into the invention of Good-Sandifer-Evans-Jiang, in order to alert users to upcoming maintenance requirements and to remove the human forgetfulness factor.

Regarding claim 18 and 20, these are system claims corresponding to the method claimed in claims 5 and 7. They have similar limitations; therefore, claims 18 and 20 are rejected under the same rationale.

Regarding claim 19, Good-Sandifer-Evans-Jiang-Chapin teach the invention substantially as claimed, as aforementioned in claim 18 above, including a back-up server whereby duplicate copies are kept of records recorded in database [Good -- **Figure 8, Col. 7 lines 43-53 and Col. 11 lines 20-30 – Regional communications terminal, i.e. server, sends file containing all vehicle service and status information to central equipment manager to provide backup to the regional communications terminals database**].

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Nelson (U.S. 6,487,479) discloses a system for accessing aircraft engine repair information over a network which is stored in a database.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas J. Mauro Jr. whose telephone number is 703-605-1234. The examiner can normally be reached on M-F 8:00a.m. - 4:30p.m..

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on 703-308-5221. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



TJM

April 29, 2004



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